

Notice of Allowability**Application No.**

10/790,466

Applicant(s)

DULAC, STEPHEN P.

Examiner

OSCAR A. LOUIE

Art Unit

2436

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/30/2009.
2. ☒ The allowed claim(s) is/are 1-22 and 24-30 (herein renumbered as Claims 1-29).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 03/03/2010.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Oscar A. Louie/
Examiner, Art Unit 2436

DETAILED ACTION

This Examiner's Amendment and Examiner's Reasons for Allowance action is in response to the filing of 11/30/2009.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Victor Cooper on 03/03/2010.

- The application has been amended as follows:

Claim 1. (CURRENTLY AMENDED) A method of providing a video program in response to a demand by a subscriber, wherein the video program is repeatedly transmitted on one of a plurality of channels by a headend, each repeated transmission separated from a previous transmission by a predetermined period of time, the method comprising the steps of:

inserting a trigger into the video program at a predetermined transition point;

delivering a first portion of the ~~[[one]]~~ video program available for viewing on demand,
the first portion of the video program comprising a trigger inserted at a predetermined transition point;

if reception and decryption of the received first portion of the video program is authorized, decrypting the first portion of the at least one video program;

storing the decrypted first portion of the video program ~~as unencrypted data~~ on a digital video recorder (DVR);

offering the video program for purchase by the subscriber;

accepting a subscriber demand to purchase the ~~complete~~ video program;

retrieving the stored first portion of the ~~at least one~~ video program from the DVR after accepting a subscriber demand to purchase the ~~complete~~ video program;

authorizing capture and decryption of a remaining portion of the purchased video program from the headend;

switching from the stored first unencrypted portion of the at least one video program to the remaining portion of the purchased video program at a time indicated by the trigger.

Claim 2. (ORIGINAL) The method as claimed in claim 1 wherein said step of delivering a portion of at least one video program further comprises delivering a portion of at least one video program on a hidden channel.

Claim 3. (PREVIOUSLY PRESENTED) The method as claimed in claim 1 wherein the remaining portion comprises less than all of the program and including at least the portion not stored in the first portion.

Claim 4. (PREVIOUSLY PRESENTED) The method as claimed in claim 1 wherein said step of switching from the stored first unencrypted portion of the at least one video program to the remaining portion of the video program further comprises switching to the remaining portion at one of a plurality of predetermined transition points determined by the trigger.

Claim 5. (CURRENTLY AMENDED) A method of purchasing a program on demand comprising the steps of:

determining if reception of a first portion of the program is authorized according to a subscription service level;

if reception of the encrypted first portion is authorized, receiving [[a]] the encrypted first unencrypted portion of the program for purchase from a headend;

determining if decryption of the received first portion is authorized based on received conditional access metadata

if decryption of the received first portion is authorized, decrypting the received first portion of the program;

storing the received decrypted first ~~unencrypted~~ portion of the program for later purchase on a subscriber's digital video recorder;

offering the program for purchase;

selecting the program for purchase;

retrieving the stored first ~~unencrypted~~ decrypted portion of the selected program from the subscriber's digital video recorder for viewing by the subscriber;

receiving a remaining portion of the selected program from the headend;

authorizing storage of the program by the subscriber's digital video recorder according to a subscription service level;

if the storage of the program is authorized, splicing the decrypted first ~~unencrypted~~ portion of the selected program with the remaining portion of the selected program to form a complete program;

storing the complete program on the digital video recorder for a predetermined period of time.

Claim 6. (CURRENTLY AMENDED) The method as claimed in claim 5 wherein the step of receiving the first ~~unencrypted~~ portion of a program further comprises receiving the first ~~unencrypted~~ portion of the program over a channel that is hidden to the subscriber but recognized by the digital video recorder.

Claim 7. (CURRENTLY AMENDED) The method as claimed in claim 6 wherein the step of receiving the first ~~unencrypted~~ portion of the program further comprises receiving information about the program in addition to the first unencrypted portion.

Claim 8. (CURRENTLY AMENDED) The method as claimed in claim 7 wherein the information in addition to the first ~~unencrypted~~ portion further comprises information selected from the group comprising promotional video, additional description about the program and program reviews.

Claim 9. (CURRENTLY AMENDED) The method as claimed in claim 8 further comprising the step of offering a free preview of a program from the stored first ~~unencrypted~~ portion.

Claim 10. (CURRENTLY AMENDED) The method as claimed in claim 6 wherein said step of splicing the first ~~unencrypted~~ decrypted portion of the selected program with the remaining portion of the selected program to form the complete program comprises the steps of:

inserting triggers at predetermined transition points in the remaining portion of the selected program;

delivering the inserted triggers with the program;

identifying the inserted triggers at the digital video recorder for switching from the stored first ~~unencrypted~~ decrypted portion of the program to the remaining portion of the program.

Claim 11. (PREVIOUSLY PRESENTED) The method as claimed in claim 10 wherein the triggers are delivered with the program.

Claim 12. (ORIGINAL) The method as claimed in claim 10 wherein the triggers are included with a service's metadata.

Claim 13. (CURRENTLY AMENDED) An apparatus configured to provide a program in response to a subscriber demand comprising:

a digital video recorder being an integrated receiver/decoder having digital video recording capabilities, the digital video recorder comprising;

~~a first unencrypted portion of a program stored on the digital video recorder;~~

means for determining if reception of a first portion of the program is authorized according to a subscription service level and for receiving the first portion of the program if authorized;

means for determining if decryption of the received first portion is authorized and for decrypting the received first portion if authorized based on received conditional access metadata;

means for accepting an offer to purchase the program;

means for retrieving the decrypted first ~~unencrypted~~ portion from storage on the digital video recorder while retrieving a remaining portion of the program from a headend;

means for authorizing decryption of the remaining portion of the program;

means for splicing the decrypted first ~~unencrypted~~ portion of the at least one program with the remaining portion of the program to define a complete program;

means for storing the complete program on the digital video recorder.

Claim 14. (PREVIOUSLY PRESENTED) The apparatus as claimed in claim 13 wherein the offer to purchase the program further comprises a program guide stored on the digital video recorder.

Claim 15. (CURRENTLY AMENDED) The apparatus as claimed in claim 14 further comprising a channel hidden from the program guide but known by the digital video recorder for sending the first ~~unencrypted~~ portion to the digital video recorder for storage thereon.

Claim 16. (CURRENTLY AMENDED) The apparatus as claimed in claim 13 wherein the means for splicing the first ~~unencrypted~~ portion with the remaining portion further comprises triggers inserted into the remaining portion at predetermined transition points for identification by the digital video recorder as a point of transition between the first ~~unencrypted~~ portion and the remaining portion.

Claim 17. (PREVIOUSLY PRESENTED) The apparatus of claim 13, wherein at least a portion of the program is repeatedly transmitted on one of a plurality of channels, each repeated transmission separated from a previous transmission by a predetermined period of time.

Claim 18. (PREVIOUSLY PRESENTED) The apparatus of claim 17, wherein the at least a portion of the program consists of the remaining portion of the program.

Claim 19. (PREVIOUSLY PRESENTED) The apparatus of claim 17, wherein the at least a portion of the program comprises the entire program.

Claim 20. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the trigger is included in a vertical blanking interval of the video program.

Claim 21. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the video program is associated with services metadata and the trigger is included with the services metadata.

Claim 22. (CURRENTLY AMENDED) The method of claim 1, wherein the DVR determines when to store the first ~~unencrypted program~~ portion of the at least one video program based on received metadata.

Claim 23. (CANCELED).

Claim 24. (CURRENTLY AMENDED) A method of providing at least one video program in response to a demand by a subscriber, wherein the video program is repeatedly transmitted on one of a plurality of channels by a headend, each repeated transmission separated from a previous transmission by a predetermined period of time, the method comprising the steps of:

inserting a trigger into the video program at a predetermined transition point;

delivering a first portion of the at least one video program available for viewing on demand;

storing the first portion of the video program as unencrypted data on a digital video recorder (DVR);

offering the at least one video program for purchase by the subscriber;

accepting a subscriber demand to purchase the ~~complete~~ at least one video program;

retrieving the stored first portion of the at least one video program from the DVR after accepting a subscriber demand to purchase the complete at least one video program;

authorizing capture and decryption of a remaining portion of the purchased at least one video program from the headend; and

switching from the stored first unencrypted portion of the at least one video program to the remaining portion of the purchased at least one video program at a time indicated by the trigger[.];

wherein the delivered first portion of the at least one video program is encrypted and includes conditional access metadata and the method further comprises the steps of:

determining if reception of the delivered first portion of the at least one video program is authorized according to a subscription service level;

if reception of the delivered first portion of the at least one video program is authorized, determining if decryption of the received first portion of the at least one video program is authorized based on received conditional access metadata including an entitlement control message; and

if decryption of the received and delivered first portion of the at least one video program is authorized, decrypting the first portion of the at least one video program to produce the unencrypted data before ~~storage~~ storing the unencrypted data on the DVR.

Claim 25. (NEW) The method as claimed in claim 24 wherein said step of delivering the first portion of the at least one video program further comprises delivering the first portion of the at least one video program on a hidden channel.

Claim 26. (NEW) The method as claimed in claim 24 wherein the remaining portion of the purchased video program comprises less than all of the at least one video program and including at least the portion not stored in the first portion of the at least one video program.

Claim 27. (NEW) The method as claimed in claim 24 wherein said step of switching from the stored first portion of the at least one video program to the remaining portion of the video program further comprises switching to the remaining portion of the at least one video program at one of a plurality of predetermined transition points determined by the trigger.

Claim 28. (NEW) The method of claim 24, wherein the trigger is included in a vertical blanking interval of the at least one video program.

Claim 29. (NEW) The method of claim 24, wherein the at least one video program is associated with services metadata and the trigger is included with the services metadata.

Claim 30. (NEW) The method of claim 24, wherein the DVR determines when to store the first portion of the at least one video program based on received metadata.

Allowance

2. Claim 23 has been cancelled.
3. Claims 1-22 & 24-30 have been amended with written arguments which overcome the examiner's prior rejections and objections, see paper of 09/01/2009. The examiner withdraws all outstanding rejections and objections to Claims 1-22 & 24-30.
4. Claims 1-22 & 24-30 are allowed.

Examiner's Statement of Reasons for Allowance

5. Prior art was found which disclosed method for providing video programming nearly on demand [e.g. Ullrich et al. (US-5583937-A)] and system and method for secure purchase and delivery of video content programs [e.g. Spies (US-6055314-A)] and security model for interactive television applications [e.g. Szymanski (US-6148081-A)] and method and apparatus for selective recording of television programs using event notifications [e.g. Gorbatov et al. (US-20030018980)] and distribution of video content using client to host pairing of integrated receivers/decoders [e.g. Kahn et al. (US 20080019529 A1)] and [e.g. Liao et al. ("The Split and Merge Protocol for Interactive Video-on-Demand")] and [e.g. Ma et al. ("Multicast Video on Demand Services")].
6. The following is an examiner's statement of reasons for allowance:
- The prior art of record does not teach or render obvious the limitations as recited in independent Claims 1, 5, 13, & 24 specific to "determining if reception of the delivered first portion of the at least one video program is authorized according to a subscription service level" and "if reception of the delivered first portion of the at least one video program is authorized, determining if decryption of the received first portion of the at least one video program is authorized based on received conditional access metadata including an entitlement control message" and "if decryption of the received and delivered first portion of the at least one video program is authorized, decrypting the first portion of the at least one video program to produce the unencrypted data before storing the unencrypted data on the DVR".
 - Dependent claims are allowed as they depend from an allowable independent claim.

- Therefore, the Examiner considers both the above limitations in combination with the remaining limitations as found in each respective independent claim as applied to video on demand distributed in a broadcast network as the non-obvious novelties of the invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Oscar Louie whose telephone number is 571-270-1684. The examiner can normally be reached Monday through Thursday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami, can be reached at 571-272-4195. The fax phone number for Formal or Official faxes to Technology Center 2400 is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

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PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OSCAR A LOUIE/

03/08/2010

/Nasser Moazzami/

Supervisory Patent Examiner, Art Unit 2436